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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,943	02/20/2004	Paul Anthony Murray		9697

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EXAMINER

GAY, JENNIFER HAWKINS

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/781,943	Applicant(s) MURRAY ET AL.	
	Examiner Jennifer H. Gay	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-11 is/are allowed.
- 6) ☒ Claim(s) 12, 13, 15 and 16 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 16 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Neither the specification or the drawings indicate that the pig ever leaves the first tube. As depicted in the figures, the pig would not be capable of moving “up the other tube” due to a difference in diameter size. For the purposes of examination, it has been assumed that the phrase “up the other tube” should read -- up the first tube--.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Morgan (US 3,991,825).

Regarding claim 15: Morgan discloses an apparatus for raising a sample of liquid from a wellbore to the surface. The apparatus includes the following features:

- A pair of tubes **16**, **50** extending alongside each other from within the wellbore to the surface. Each of the tubes has a uniform bore along its length.
- A connector (Figure 1) linking the tubes to define a U-shaped duct.
- A valve **22** communicating between the inside and outside of one of the tubes **16** near its lower end.

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- A pig 36 insertable into one of the tubes 16 at the upper end. The pig is liquid impermeable via the valve 38 and forms a seal with an inside wall of the first tube.
- A means at the upper end to adjust the pressure in each tube (Figure 1) to move the pig up and down within the apparatus.

Regarding claim 16: Morgan further teaches a method for raising a sample using the above apparatus. The method involves the following steps:

- Arranging the tubes so that the connector is at a lower level and the other end of the U-shaped duct are at a higher level.
- Inserting the pig into the tube.
- Adjusting the pressure so that the pig moves to the lower end of the tube and then up the tube thus causing liquid to enter the tube through the valve.
- Adjusting the pressure so that the pig pushes liquid that has entered the tube to the other end of the tube.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan.

Regarding claim 12: Morgan further teaches a method for raising a sample using an apparatus for raising a sample of liquid from a wellbore to the surface. The apparatus includes the following features:

- A pair of tubes 16, 50 extending alongside each other from within the wellbore to the surface. Each of the tubes has a uniform bore along its length.

- A connector (Figure 1) linking the tubes to define a U-shaped duct.
- A valve 22 communicating between the inside and outside of one of the tubes 16 near its lower end.
- A pig 36 insertable into one of the tubes 16 at the upper end. The pig is liquid impermeable via the valve 38 and forms a seal with an inside wall of the first tube.
- A means at the upper end to adjust the pressure in each tube (Figure 1) to move the pig up and down within the apparatus.

The method involves the following steps:

- Arranging the tubes so that the connector is at a lower level and the other end of the U-shaped duct are at a higher level.
- Inserting the pig into the tube.
- Adjusting the pressure so that the pig moves to the lower end of the tube and then up the tube thus causing liquid to enter the tube through the valve.
- Adjusting the pressure so that the pig pushes liquid that has entered the tube to the other end of the tube.

Morgan discloses all of the limitations of the above claims except for the tubes being flexible. However, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have used flexible tubes in the apparatus of Morgan in order to have used tubing that was easier to maneuver and install in small wellbores.

Further, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have used flexible tubes in the apparatus of Morgan, since the examiner takes Official Notice of the equivalence of flexible and rigid tubing for their use in the fluid collection art and the selection of any of these known equivalents to form the U-shaped duct of Morgan would be within the level of ordinary skill in the art.

Regarding claim 13: The valve of Morgan is a non-return valve. The method further involves decreasing the pressure at the top of the first tube to a level below

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atmospheric to cause fluid to enter the first tube through the valve and raise to the surface.

Allowable Subject Matter

7. Claims 8-11 are allowed.

8. Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. In view of applicant's amendment, the objections to the drawings, specification, and claims have been withdrawn.

10. Applicant's arguments filed November 10 2005 have been fully considered but they are not persuasive.

Applicant has argued that the apparatus of Morgan differs from that of the instant application because the apparatus of Morgan is intended to be permanent and is considerably more complicated. While the examiner acknowledges these differences, it is noted that they have little bearing on the use of Morgan to reject the present claims. Morgan includes all of the structural features of the claimed invention thus qualifies as prior art.

Applicant has argued that the valve of Morgan is not positioned above the resting position of the pig. While the examiner acknowledges that this is true, only claim 8 requires that the valve be located above the resting position of the pig. Applicant's argument is moot with regards to claims 12, 15, and 16.

Applicant has argued that Morgan does not provide a means for adjusting the pressure in the tubes other than opening one to the atmosphere and the use of compressed air. The examiner first notes that applicant's own invention uses compressed air to pressurize the claimed tubes. The compressed air applied to the tube of Morgan will pressurize the whole system. Secondly, the opening of one tube of Morgan to the

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atmosphere will result in a reduction in pressure in the system as a whole thus meeting the requirements of the claims.

Applicant has argued that Morgan does not teach decreasing the pressure in the tube to "below atmospheric pressure". While the examiner agrees that this is not specifically taught by Morgan, the opening of the tube to the atmosphere will result in a momentary vacuum being pulled on the system, i.e. a pressure below atmospheric.

Conclusion

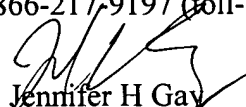
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The remaining references made of record disclose various wellbore production systems that involve the use of pigs or plungers.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H. Gay whose telephone number is (571) 272-7029. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jennifer H Gay
Primary Examiner
Art Unit 3672

JHG
December 13, 2005